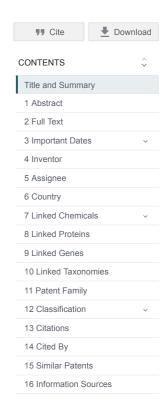
PATENT SUMMARY

Luciferase sequences utilizing infrared-emitting substrates to produce enhanced luminescence

| Patent | US-9732373-B2 |
|-------------------------------|--|
| Inventor | ENCELL LANCE P (US) HALL MARY P (US) WOOD KEITH V (US) WOOD MONIKA G (US) |
| Assignee | PROMEGA CORP (US) |
| Country | United States |
| Dates | Grant Priority 2017/08/15 2014/09/11 |
| reported by PubChem contribut | ormation in PubChem about patent US-9732373-B2. This includes chemicals mentioned, as cors, as well as other content, such as title, abstract, and International Patent Classification ut how this page was constructed, please visit the PubChem patents help page. |



1 Abstract ② 🖸

Provided herein are isolated polynucleotide encoding modified click beetle luciferase polypeptides that have enhanced luminescence and longer wavelength near-infrared signals. The disclosure also relates to near-infrared bioluminescence systems that include said modified click beetle luciferase polypeptides and novel luciferin derivatives, as well as methods of using said modified click beetle luciferase polypeptides and bioluminescence systems.

2 Full Text



USPTO

http://patft.uspto.gov/netacgi/nph-Parser?

Sect1=PTO1&Sect2=HITOFF&p=1&u=/netahtml/PTO/srchnum.html&r=1&f=G&l=50&d=PALL&s1=9732373.PN.

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Google

https://patents.google.com/patent/US9732373B2

| 3 Important Dates | ② ☑ |
|----------------------|------------|
| 3.1 Priority Date | ② Z |
| 2014/09/11 | |
| ▶ Google Patents | |
| 3.2 Filing Date | ② Z |
| 2015/09/11 | |
| ► Google Patents | |
| 3.3 Publication Date | ② Z |
| 2017/08/15 | |
| ▶ Google Patents | |
| 3.4 Grant Date | ② Z |

2017/08/15

4 Inventor

ENCELL LANCE P (US)
HALL MARY P (US)
WOOD KEITH V (US)
WOOD MONIKA G (US)

5 Assignee ② 🖸

PROMEGA CORP (US)

United States

7 Linked Chemicals



7.1 PubChem Compounds



| 168 items View Mor | re Rows & Details 🔼 | | | Download |
|--------------------|---------------------|--------------------------------|---|-------------------------|
| | | | SORT BY Pleas | se Choose One |
| Structure | Compound CID | Name | Molecular Formula | Molecular Weight, g/mol |
| *** | 232 | DL-Arginine | $C_6H_{14}N_4O_2$ | 174.2 |
| ۳۲۰۰ پېښلونو. | 745 | gamma-Glutamylcysteinylglycine | C ₁₀ H ₁₇ N ₃ O ₆ S | 307.33 |
| | 4766 | Phenol red | C ₁₉ H ₁₄ O ₅ S | 354.4 |
| *** | 6076 | Cyclic AMP | $C_{10}H_{12}N_5O_6P$ | 329.21 |
| | 6202 | Thiamine hydrochloride | C ₁₂ H ₁₈ Cl ₂ N ₄ OS | 337.3 |
| | | 1 2 3 34 N | ext > | |

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7.2 PubChem Substances



| 186 items View More Rows & Details ☑ | | | | |
|--------------------------------------|---------------|------------------|--------------------|-------------|
| SOR | | SORT BY Please C | hoose One 🗸 | |
| Structure | Substance SID | Compound CID | Substance Synonyms | Data Source |
| | 226393691 | 135398570 | SCHEMBL738 | SureChEMBL |
| | 226394037 | 6076 | SCHEMBL1244 | SureChEMBL |
| | 226394054 | 25322948 | SCHEMBL1264 | SureChEMBL |
| J | 226394420 | 232 | SCHEMBL1790 | SureChEMBL |
| ٦. | | | | |



▶ PubChem

8 Linked Proteins



| 14 items View More 🔼 | | ■ Download |
|----------------------|---|------------|
| PubChem Protein | Protein Name | |
| O15263 | Beta-defensin 4A (human) | |
| Q9H213 | Melanoma-associated antigen H1 (human) | |
| Q5GHF7 | Adenylate isopentenyltransferase (European hop) | |
| Q94IC9 | Adenylate isopentenyltransferase (thale cress) | |
| Q00205 | Pectin lyase B (Aspergillus niger) | |
| | 1 2 3 Next > | |

▶ PubChem

9 Linked Genes





| 236 items View More | Z | Download |
|---------------------|--|----------|
| PubChem Gene | Gene Name | |
| 836 | CASP3 - caspase 3 (human) | |
| 841 | CASP8 - caspase 8 (human) | |
| 27350 | APOBEC3C - apolipoprotein B mRNA editing enzyme catalytic subunit 3C (human) | |
| 80320 | SP6 - Sp6 transcription factor (human) | |
| 12367 | Casp3 - caspase 3 (house mouse) | |
| | 1 2 3 48 Next > | |

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10 Linked Taxonomies





| 15 items View More | | Download |
|--------------------|---|----------|
| Taxonomy ID | Taxonomy | |
| 6136 | Renilla reniformis (sea pansy) | |
| 6674 | Vargula hilgendorfii (sea firefly) | |
| 7054 | Photinus pyralis (common eastern firefly) | |
| 12227 | Tobacco etch virus | |
| 12331 | Rice stripe tenuivirus | |
| | 1 2 3 Next > | |

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11 Patent Family



| EP-3191600-A1 | US-2020115735-A1 | |
|------------------|------------------|--|
| JP-2017529840-A | US-2022186287-A1 | |
| JP-2020099328-A | US-9732373-B2 | |
| JP-2022068170-A | WO-2016040788-A1 | |
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| JP-7058677-B2 | | |
| US-10550420-B2 | | |
| US-11293047-B2 | | |
| US-2016076079-A1 | | |
| US-2017314061-A1 | | |

12 Classification

② [2

12.1 IPC

② 🖸

G01N21/64 (inventive)

C12N9/02 (inventive)

G01N33/68 (inventive)

C12Q1/66 (inventive, first)

G01N33/542 (inventive)

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12.2 CPC

② Z

G01N21/6428 (inventive)

C12N9/0069 (inventive)

G01N2021/6439

C12Y113/12007

G01N2333/90241

C12Y113/12007

G01N33/542 (inventive)

C12Q1/66 (inventive, first)

G01N2021/6432

C12Q1/66 (inventive, first)

C12N9/0069 (inventive)

G01N33/6803 (inventive)

G01N33/542 (inventive)

G01N2021/6439

C12Q1/66 (inventive, first)

G01N2021/6432

G01N2333/90241

G01N21/6428 (inventive)

C12Y113/12007

G01N33/6803 (inventive)

G01N33/542 (inventive)

C12N9/0069 (inventive)

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16 Information Sources



1. Google Patents

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2. PubChem

https://pubchem.ncbi.nlm.nih.gov

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